again, the pectines slope much more than the stigmata, the genital aperture having been secondarily (and since the disappearance of the abdominal limbs) further pushed forward, almost totally obliterating a sternal area usually found in front of the genital opercula in those genera in which the pectines have only a moderate slope.

I refer again to my paper in 'Nature,' above cited, for some of the bearings of these vestigial stigmata on the primitive morphology of the Arachnida.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

March 7, 1894.—Dr. Henry Woodward, F.R.S., President, in the Chair.

The following communications were read:—

1. 'The Systematic Position of the Trilobites.' By H. M. Bernard, Esq., M.A., F.L.S., F.Z.S.

The Author, in his work on 'The Apodidæ,' endeavoured to show that *Apus* was the ancestral form of all existing crustacea except the Ostracoda, and as such might be expected to throw light upon the trilobites. Since the publication of this work he has been studying the organization of the trilobites themselves, and the results are given in the present communication. He discusses the great variability in the number of segments shown by the trilobites; the formation of the head by the gradual incorporation of trunk-segments; the bending round ventrally of the first segment; the 'wandering' of the eyes; the existence and modification of the 'dorsal organ'; and especially the character of the limbs.

As a result of this discussion, he states that the zoological position of the trilobites can now be fixed with considerable probability. The features described serve to connect the trilobites with *Apus*. *Apus* must be assumed to lie low in the direct line up from the original annelidan ancestor towards the modern crustacea, and the trilobites must have branched off laterally from this line, either once or more than once, in times anterior to the primitive *Apus*, as forms specialized for creeping under the protection of a hard imbricated carapace, obtained by the repetition on every segment of the pleuræ of the head-segments, which together form the head-shield.

The trilobites may be briefly described as fixed specialized stages in the evolution of the crustacea from an annelidan ancestor with its mouth bent round ventrally, so as to use its parapodia as jaws.

2. 'On the Discovery of Molluscs in the Upper Keuper at Shrewley, in Warwickshire.' By the Rev. P. B. Brodie, M.A., F.G.S.

Mr. R. B. Newton read a paper at the meeting of the British Association at Nottingham in 1893, on some lamellibranchs found at Shrewley by the Author of the present paper and Mr. Richards. In this paper details of the section where the shells were found are given, and their interest and importance pointed out, no shells having been previously detected anywhere in the New Red Sandstone in this country.

April 25, 1894.—Dr. Henry Woodward, F.R.S., President, in the Chair.

The following communication was read:—

'On a new Goniatite from the Lower Coal Measures.' By Herbert Bolton, Esq., F.R.S.E.

Sowerby in his 'Mineral Conchology' figures two fossils under the name of *Goniatites Listeri*, of which the left-hand figure is clearly *G. Listeri*, whilst the right-hand one differs considerably from it. The Author gives diagnoses of *Goniatites Listeri* and of a new species, which agrees with the form represented in Sowerby's right-hand figure. This species is limited to the shales forming the roof of the 'Bullion' or Upper Foot seam of the Lower Coal Measures, whilst *G. Listeri* ranges from the Lower Limestone Shales to the 'Bullion' seam.

MISCELLANEOUS.

The Ornithological Writings of Victor Lopez Seoane.

To the Editors of the 'Annals and Magazine of Natural History.'

Gentlemen,—The following three pamphlets by this author have fallen into my hands:—(1) "Sur deux nouvelles formes de Perdrix d'Espagne," Mém. Soc. Zool. France, vii. 1894, p. 92 &c.; (2) 'Aves nuevas de Galicia' [8vo], La Coruña, 1870, 10 pp.; (3) 'Revision del Catalogo de las Aves de Andalucia' [8vo], La Coruña, 1870, 18 pp. The last two bear the imprint—La Coruña (Imprenta y estereotipia de Vicento Abad (7—Plaza de Maria Pita—7) 1870.

With the first of these I have no quarrel, but the dates of the last two are open to grave suspicion. Indeed, when they reached me the ink in which they were printed was apparently fresh and easily smeared. The most awkward point, however, is the fact that M. Seoane refers in one of them to the 'Catalogue of the Birds in the British Museum' as "con preciosas [*sic*] descripciones, completa sinonimia, y algunas admirables láminas." The first volume of this work did not appear until 1874, or *four* years after the supposed date of M. Seoane's pamphlet.

The point at issue seems to be this: Mr. Howard Saunders published in 1872 (Proc. Zool. Soc. p. 153) a new species of Green Woodpecker from Spain (*Gecinus Sharpii*), and on seeing this description, presumably for the first time, M. Seoane has published at least one pre-dated pamphlet, in which he calls the bird *G. viridis galliciensis*, in order to gain priority. Curiously enough, the fact that M. Seoane has decided to describe these as new is noted in the French pamphlet (1) of 1894, and therein he refers to a Spanish pamphlet of 1891—'Examen critico de las Perdices de Europa y particularmente de las des España': Coruña, 1891. Is this the first intended title for 'Aves nuevas,' or shall we receive the 'Examen critico' when the ink is dry?

A similar example of this pre-dating is seen in the case of Reichenow's *Perdix hispaniensis*, a species which Seoane includes in his 1870 pamphlet 'Aves nuevas' under the name of *Perdix cinerea charrela*; and a still earlier example was pointed out by Boulenger (Zool. Record, 1885, Rept. p. 2), in which it is shown that Seoane